## Hazardous Waste Operations and Emergency Response (Hazwoper)

Functional Based Elective – Port State Control Exam

## **Notes for the Instructor**

These scenarios are based on actual incidents that involved USCG units. We changed some of the details but the basic scenarios are nearly identical to the actual incidents. We added some details to illustrate some of the hazards Marine Safety personnel will likely face in such incidents.

The PowerPoint slides that go with these scenarios contain instructions for the instructor. They are an abbreviated version of the information in this document. We encourage you to read this document and become familiar with the scenarios before using them in a class. We suggest providing class participants with a copy of the scenario and instructions from this Instructor Guide when you show the associated slide.

We encourage instructors to make these scenarios applicable to their OCMI Zones. To that end, we have left the names of the ports and the vessels blank.

Documents such as DCMs and MSDSs are as close as possible to the actual documents used in the incidents these scenarios are based on. As they say on TV, we changed the names to protect the innocent.

We have included a variety of scenarios in this Instructor Guide to give you several options for exercises. These are all designed as standalone exercises.

We encourage you to provide feedback to improve these scenarios. If you have suggestions for new scenarios please feel free to submit them.

Please make every effort to keep the focus of discussions on health and safety. Class participants will often want to expound on other subjects or bring up points that are not closely related to this subject matter.

## Instructions for Activities.

Single Person

Assign each class participant the tasks listed on the exercise scenario. Instruct them to read the scenario and develop a written list of the information the scenario requests. After an appropriate period of time, ask for a volunteer to read their list. When he/she is done, ask who has any other items to add. Facilitate a discussion of the different lists and/or different priorities. Maintain the focus of all discussions on health and safety issues.

Group

Break the class into an appropriate number of groups (we suggest at least three people per group). Assign each group the tasks listed on the exercise scenario. Instruct them to read the scenario and develop a written list of the information the scenario requests. After an appropriate period of time, ask for a group to read their list. When they are done, ask who has any other items to add. Facilitate a discussion of the different lists and/or different priorities. Maintain the focus of all discussions on health and safety issues.

**Options** 

Have the participants write their lists on a white board or on flip chart paper to make it easier for the other groups to see during their presentations.

Impose a time limit on each activity. This will add stress to the activity and cause the participants to focus more intently on the task at hand. Add an element of competition to the activity. If you impose a time limit you can also give an award or prize to the group or person who compiles the biggest list.

## Port State Control Exam Exercise Scenario Guide

Situation

You are conducting a Port State Control Examination on a containership moored port side to. You are in the engine room when the Chief Engineer informs you of a problem. A crewmember reportedly became sick when walking past some intermodal containers just above the main deck on the starboard side. The Chief Engineer is not sure what the victim's symptoms are. He makes some comments that you interpret to mean the individual involved is a bit of a sea lawyer and malcontent.

You proceed to the bridge and look out at the starboard side. The vessel has just begun discharging cargo and you can't readily see the area where the crewmember became ill. There is a rather large puddle of what appears to be vomit on the deck. There appears to be some intermodal containers in that area but you can see no signs of any leaks. You don't smell anything unusual. No other member of the crew has reported anything amiss. The petty office in your boarding team is presently examining the forward liferaft on the bow.

**Tasks** 

How can you identify the possible hazards without getting close to the scene of the reported problem? What documents should you ask to see?

Rank order these hazards from highest to lowest. Identify any potential threats to life and health.

Describe actions you can take to protect yourself from the most immediate potential hazards. Make a list of recommendations for the vessel's crew to protect themselves from any hazards you think are likely to exist in this situation. What do you want the petty officer to do?

**Instructions** 

Provide the training participants with the scenario using the handout or the PowerPoint slides.

Discuss the scenario with them and ensure they have the information necessary to answer the questions.

Provide other information if they request it.

Recognize

How can you identify the possible hazards without getting close to the scene of the reported problem? What documents should you ask to see?

**Suggestions** 

The participants can ask the Chief Mate what cargo is in the area where the crewmember got sick. They should ask to see the DCM and stow plan. They will show the presence of three intermodal containers full of methyl bromide in that area. The vomit is a biohazard.

**Evaluate** 

Rank order these hazards from highest to lowest. Identify any potential immediate threats to life and health.

Suggestions

Methyl bromide is toxic and is the most serious threat. There are no other hazardous materials in that area and there are no operations going on that would endanger personnel other than normal cargo movement. (That will create an overhead hazard but this should entail nothing beyond routine precautions.)

The biohazard from the vomit is only a problem if someone...well we don't need to elaborate.

Control

Describe actions you can take to protect yourself from the most immediate potential hazards. Make a list of recommendations for the vessel's crew to protect themselves from any hazards you think are likely to exist in this situation. What do you want the petty officer to do?

Suggestions

Restrict the number of people on scene. Request the Master to put the area off limits to his crew. Suspend any cargo operations in the area. Follow the guidance in the DOT ERG.

The other member of the boarding team should stay where he/she is. They should assist in denying entry to the area but should not attempt to get close to the containers to see if any are leaking. Participants should assume one or more of the containers is leaking and act accordingly.

Note: in the incident this is based on there was no leak and the individual was afflicted with some ailment unrelated to possible exposure to any of the cargo.

Isolate the area around the vomit and deny entry.